CLAIMS

What is claimed is:

1. A device architecture for running applications, comprising:

an operating system (OS) comprising an OS scheduler;

a Dynamic Configurable Hardware Logic (DCHL) layer comprised of a plurality of Logic Elements (LEs); and

interposed between said OS and said DCHL layer, a TiEred Multi-media Acceleration Scheduler (TEMAS) that cooperates with the OS scheduler for scheduling the LEs of the DCHL to execute applications in accordance with inherited application priorities.

2. A device architecture as in claim 1, where the TEMAS is comprised of a Tier-1 scheduler that communicates with the OS scheduler and at least one Tier-2 scheduler interposed between the Tier-1 scheduler and one DCHL configurable device.

3. A device architecture as in claim 1, where the TEMAS operates in response to configuration requests to configure and reconfigure at least some of the plurality of LEs in accordance with at least one algorithm logic.

4. A device architecture as in claim 1, where said plurality of LEs are disposed within at least one context plane.

5. A device architecture as in claim 2, comprising an application layer that comprises at least one application, a service layer that comprises said Tier-1 scheduler and said OS scheduler, a node layer that comprises said at least one Tier-2 scheduler that is coupled to a scheduling algorithm of said Tier-1 scheduler, and a hardware layer that comprises said at least one DCHL configurable device.

6. A device architecture as in claim 1, where said device comprises a device having wireless communications capability.

7. A method to execute applications in a device, comprising:

providing an operating system (OS) comprising an OS scheduler and a Dynamic Configurable Hardware Logic (DCHL) layer comprised of a plurality of Logic Elements (LEs);

interposing between said OS and said DCHL layer a TiEred Multi-media Acceleration Scheduler (TEMAS); and

operating the TEMAS in cooperation with the OS scheduler for scheduling the LEs of the DCHL to execute applications in accordance with inherited application priorities.

8. A method as in claim 7, where the TEMAS is comprised of a Tier-1 scheduler for communicating with the OS scheduler and at least one Tier-2 scheduler interposed between the Tier-1 scheduler and one DCHL configurable device.

9. A method as in claim 7, further comprising receiving configuration requests with the TEMAS and, in response, configuring and reconfiguring at least some of the plurality of LEs in accordance with at least one algorithm logic.

10. A method as in claim 7, where said plurality of LEs are disposed within at least one context plane.

11. A method as in claim 8, comprising an application layer that comprises at least one application, a service layer that comprises said Tier-1 scheduler and said OS scheduler, a node layer that comprises said at least one Tier-2 scheduler that is coupled to a scheduling algorithm of said Tier-1 scheduler, and a hardware layer that comprises said at least one DCHL configurable device.

12. A method as in claim 7, where said device comprises a device having wireless communications capability.

13. A wireless communications device, comprising:

an applications layer comprising a plurality of applications;

a service layer comprising an operating system (OS) having an OS scheduler;

a hardware layer comprising Dynamic Configurable Hardware Logic (DCHL) comprised of a plurality of Logic Elements (LEs); and

interposed between said OS and said DCHL in said service layer and in a node layer, a TiEred Multi-media Acceleration Scheduler (TEMAS) that cooperates with the OS scheduler for scheduling the LEs of the DCHL to execute said applications in accordance with inherited application priorities.

14. A device as in claim 13, where said TEMAS is comprised of a Tier-1 scheduler that communicates with the OS scheduler and at least one Tier-2 scheduler interposed between the Tier-1 scheduler and one DCHL configurable device.

15. A device as in claim 13, where said TEMAS operates in response to configuration requests to configure and reconfigure at least some of the plurality of LEs in accordance with at least one algorithm logic.

16. A device as in claim 13, where said plurality of LEs are disposed within at least one context plane.

17. A device as in claim 13, where said device comprises a cellular telephone.